

REMARKS

This Amendment is being filed in response to the Office Action mailed July 24, 2008, which has been reviewed and carefully considered. Reconsideration and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-7, 9 and 11-22 remain in this application, where claims 8 and 10 have been canceled without prejudice, and claims 11-22 have been added.

In the Office Action, claim 8 is rejected under 35 U.S.C. §101 and 35 U.S.C. §112, first paragraph. Without agreeing with the position forwarded in the Office Action, and in the interest of advancing prosecution, claim 8 has been cancelled without prejudice. The cancellation of claim 8 renders moot these rejections under 35 U.S.C. §101 and §112, first paragraph.

In the Office Action, the Examiner objected to claim 1 for certain informalities. In response, claim 1 has been amended to remove the informalities noted by the Examiner. Accordingly,

withdrawal of the objection to claim 1 is respectfully requested.

In the Office Action, claims 1-4 and 7-9 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,377,652 (Abe) in view of by U.S. Patent No. 6,377,916 (Hardwick). Claims 5-6 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Abe in view of Hardwick and Window Functions where a URL is noted in the Office Action. It is respectfully submitted that claims 1-7, 9 and 11-22 are patentable over Abe, Hardwick and Window Functions for at least the following reasons.

Abe is directed to reconstruction of wideband speech from narrowband speech using codebooks. As correctly note on page 5, paragraph three, Abe does not disclose "determining a required pitch bell location in the domain of the signal to be synthesized," as recited in independent claim 1, and similarly recited in independent claims 9 and 17. However, it is alleged that this would be obvious in view of the disclosure in column 7, lines 43-44, 35-38 and 10-22.

Applicant respectfully traverse and points out that column 7, lines 10-46 merely disclose selecting representative waveform

segments of voiced and unvoiced speech, by centering one or two analysis window length(s) about each frame, and using the extracted waveform as a representative waveform segment. A wideband speech signal is reconstructed from the narrowband signal, by LPC analysis to obtain spectrum parameters that are vector-quantized using a narrowband speech codebook 208. The wideband speech signal is reconstructed in a waveform synthesizer where waveform segments are extracted from a representative waveform codebook 212 and voiced speech is synthesized by pitch-synchronous overlapping of the extracted representative waveform segments, while unvoiced speech is synthesized by randomly using waveforms of a length corresponding to the window shift width (in the LPC analysis).

There is simply, neither a discloser nor a suggestion in Abe of determining a required pitch bell location in the domain of the signal to be synthesized," as recited in independent claim 1, and similarly recited in independent claims 9 and 17.

Assuming, arguendo, that this feature is suggested in Abe, there is still no disclosure or suggestion of "mapping the required pitch bell location onto an original signal to provide a first

pitch bell location," as recited in independent claim 1, and similarly recited in independent claims 9 and 17.

Column 9, lines 6-10 (noted on page 5 section 10.b of the Office Action,) merely disclose that, for "unvoiced speech, start point selectors 705 and 706 extract the representative waveform segments by steps of one analysis window shift width while randomly selecting the start points of the waveform segments being extracted." Randomly selecting start points simply does not disclose or suggest "mapping the required pitch bell location onto an original signal to provide a first pitch bell location," as recited in independent claim 1, and similarly recited in independent claims 9 and 17. Selecting start points has nothing to do with mapping, let alone mapping onto an original signal.

Assuming, arguendo, that this feature too is suggested in Abe, there is still no disclosure or suggestion of "randomly shifting the first pitch bell location to provide a second pitch bell location," as recited in independent claim 1, and similarly recited in independent claims 9 and 17.

Column 9, lines 6-10 and column 7, lines 10-22 (noted on page

5 section 10.c of the Office Action,) merely disclose selecting start points and producing representative codebook 212 which has the representative waveform segments for respective code numbers of the codebook 104. Such disclosure has nothing to do with randomly shifting one location to another, let alone randomly shifting the first pitch bell location of the original signal to provide a second pitch bell location on the original signal, as recited in independent claims 1, 9 and 17. Hardwick and Window Functions are cited to allegedly show other features and do not remedy the deficiencies in Abe.

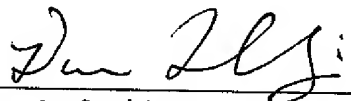
Accordingly, it is respectfully submitted that independent claims 1, 9 and 17 are allowable, and allowance thereof is respectfully requested. In addition, it is respectfully submitted that claims 2-7, 11-16 and 18-22 should also be allowed at least based on their dependence from independent claims 1, 9 and 17.

In addition, Applicant denies any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the

presented remarks. However, the Applicant reserves the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

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